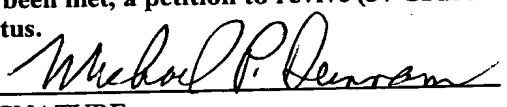


FORM PTO-1390 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY DOCKET NUMBER UPN-4566																																																									
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		U.S. APPLICATION NO. <b>10/538361</b> (37 CFR 1.5)																																																									
INTERNATIONAL APPLICATION NO. PCT/US2003/039714	INTERNATIONAL FILING DATE 12 December 2003 (12.12.2003)	PRIORITY DATE CLAIMED 13 December 2002 (13.12.2002)																																																									
TITLE OF INVENTION <b>PRACTICAL PULSE SYNTHESIS VIA THE DISCRETE INVERSE SCATTERING TRANSFORM</b>																																																											
APPLICANT(S) FOR DO/EO/US <b>Charles L. EPSTEIN and Jeremy MAGLAND</b>																																																											
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:																																																											
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; vertical-align: top;">1.</td> <td style="width: 5%; text-align: center; vertical-align: top;"><input checked="" type="checkbox"/></td> <td style="padding-left: 10px;">This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</td> </tr> <tr> <td>2.</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="padding-left: 10px;">This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</td> </tr> <tr> <td>3.</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="padding-left: 10px;">This is an express request to begin national examination procedures (35 U.S.C. 371(f)). 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(<b>unexecuted</b>)</td> </tr> <tr> <td>10.</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="padding-left: 10px;">An English translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</td> </tr> </table>			1.	<input checked="" type="checkbox"/>	This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.	2.	<input type="checkbox"/>	This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.	3.	<input checked="" type="checkbox"/>	This is an express request to begin national examination procedures (35 U.S.C. 371(f)). 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Items 11. to 20. below concern other document(s) or information included:																																																											
11.	<input type="checkbox"/>	An Information Disclosure Statement under 37 CFR 1.97 and 1.98.																																																									
12.	<input type="checkbox"/>	An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.																																																									
13.	<input checked="" type="checkbox"/>	A preliminary amendment.																																																									
14.	<input checked="" type="checkbox"/>	An Application Data Sheet under 37 CFR 1.76.																																																									
15.	<input type="checkbox"/>	A substitute specification.																																																									
16.	<input type="checkbox"/>	A power of attorney and/or change of address letter.																																																									
17.	<input type="checkbox"/>	A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.182-1.825.																																																									
18.	<input type="checkbox"/>	A second copy of the published international application under 35 U.S.C. 154(d)(4).																																																									
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20.	<input checked="" type="checkbox"/>	Other items or information:																																																									
		- a copy of Form PCT/IB/308 (Notice Informing the Applicant of the Communication of the International Application to the Designated Offices); - a copy of the International Search Report; - a return postcard.																																																									

EV482611515US

 EXPRESS MAIL Mailing Label No. EV 482611515 US  
 Date of Deposit: June 13, 2005

U.S. APPLICATION NO. (If known 37 C.F.R. 1.5)		INTERNATIONAL APPLICATION NO. PCT/US2003/039714		ATTORNEY DOCKET NUMBER UPN-4566	
The following fees are submitted:					
21. <input checked="" type="checkbox"/> Basic national fee		\$300.00		\$300.00	
22. <input checked="" type="checkbox"/> Examination fee				\$	
If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4)		\$100.00		\$200.00	
All other situations		\$200.00			
23. <input checked="" type="checkbox"/> Search fee					
Search fee (37 CFR 1.445(a)(2)) has been paid on the International application to the USPTO as an International Searching Authority		\$100.00		\$100.00	
International Search Report prepared and provided to the Office		\$400.00			
All other situations		\$500.00			
<b>TOTAL of 21, 22 and 23 =</b>				<b>\$600.00</b>	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
69- 100 =	0/50 =		X \$250.00	\$ 0	
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	
Claims	Number Filed	Number Extra	Rate		
Total claims	29- 20 =	9	X \$50.00	\$450.00	
Independent Claims	4- 3 =	1	X \$200.00	\$200.00	
Multiple dependent claims(s) (if applicable)			+ \$360.00	\$	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$1,250.00</b>	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$	
<b>SUBTOTAL =</b>				<b>\$625.00</b>	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	
<b>TOTAL NATIONAL FEE =</b>				<b>\$625.00</b>	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				+	
<b>TOTAL FEES ENCLOSED =</b>				<b>\$625.00</b>	
				Amount to be:	\$
				refunded	
				charged	\$
a. <input checked="" type="checkbox"/> A check in the amount of \$625.00 to cover the above fee is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. 23-3050 in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 23-3050. A duplicate copy of this sheet is enclosed.					
<b>NOTE:</b> Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.					
SEND ALL CORRESPONDENCE TO:					
John W. Caldwell Woodcock Washburn LLP One Liberty Place - 46th Floor Philadelphia, PA 19103 (215) 568-3100			<div style="text-align: center;">           SIGNATURE       </div> <div style="text-align: center;">         Michael P. Dunnam          NAME       </div> <div style="text-align: center;">         32,611          REGISTRATION NUMBER       </div>		